

IAN LOCHHEAD

3D DATA SCIENTIST | XR CONSULTANT AND DEVELOPER

SUMMARY

3D spatial data scientist and extended reality researcher with 9+ years of experience designing and developing innovative 3D workflows, virtual and augmented reality visualizations, and web-based visualization interfaces. An effective collaborator and analytical thinker with exceptional problem-solving skills and a passion for emerging technology.

SKILLS

- Unity Development
- 3D Modelling (Maya & Blender)
- Photogrammetry
- GIS (ArcGIS and QGIS)
- C#, Python, HTML
- Innovation
- Rapid Prototyping
- Problem-Solving
- Collaboration

AWARDS

- Graduate Fellowship (2017, 2019, & 2020)
- NSERC Post Graduate Scholarship - Doctoral (2018)
- Graduate Entrance Scholarship (2017)



WORK EXPERIENCE

3D VISUALIZATION CONSULTANT & DEVELOPER • CONTRACTOR • 08/22 • PRESENT

- Advised clients on the design and development of 3D visualizations
- Web and XR based interface design and development

XR CONSULTANT & DEVELOPER • HAZARDSCAPE • 08/21 • 08/22

- Consulted for disaster and emergency management professionals on 3D spatial data and immersive visual analytics
- Designed and developed a VR-based data visualization prototype

RESEARCH ASSOCIATE • SIMON FRASER UNIVERSITY • 09/15 • 08/22

- Collaborated on GIScience and XR research projects for government, industry, and academic partners
- Designed and developed XR interfaces for diverse client groups
- Contributed to research reports and journal manuscripts

LAB INSTRUCTOR • SIMON FRASER UNIVERSITY • 09/15 • 04/22

- Designed and delivered GIS, 3D visualization, and XR development instructional materials, presentations, and labs
- Mentored 100+ students on 3D GIScience and XR development

PROJECT EXPERIENCE

GRADUATE RESEARCHER • SIMON FRASER UNIVERSITY • 09/15 • 08/22

- Designed and conducted studies on data quality, data visualization, human factors, and emerging XR interface technology
- Managed research projects and published 8 first-author papers

MITACS INTERN • OCEAN WISE CONSERVATION ASSOC. • 10/17 • 02/19

- Engineered an innovative underwater data capture workflow and established a set of performance benchmarks
- Developed XR interface prototypes for experiential 3D data analysis

EDUCATION

PhD • Faculty of Environment • Simon Fraser University • 2022

MSc • Faculty of Environment • Simon Fraser University • 2017

BA • Faculty of Environment • Simon Fraser University • 2015

Diploma • Marketing & Sales Management • Sauder School of Business • 2011





